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K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690				
EXAMINER				
MEHTA, HONG T				
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/523,767  
Filing Date: February 07, 2005  
Appellant(s): KASTENMAYER ET AL.

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Robert M. Barrett  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 4, 2010 appealing from the Office action mailed April 19, 2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-3, 6-11, 26 and 27.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

Kirschmann, John. Nutrition Almanac, McGraw-Hill Books, (1973), pp. 239;  
Meiji Seika Kaisha (JP 7308172 A) Abstract Translation;  
Shlyankevich (US 5,424,331);

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1, 3, 6-11, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meiji Seika Kaisha (JP 7308172 A, Abstract translation) in view of Shlyankevich (US 5,424,331) and further evidenced by Kirschmann (Nutrition Almanac, 1973).**

**Regarding claims 1, 6, 7, 8, 10, 26 and 17,** Meiji Seika Kaisha discloses a baked cookie composition to promote calcium absorption within a person. The composition comprises 70 grams of egg powder and 6 grams of calcium carbonate. Calcium carbonate has approximately 2.4 grams of calcium in the calcium carbonate. Egg powder is considered to be egg whites and egg yolks. Kirschmann teaches egg compositions comprise 31 grams of whites (64.6%) and 17 grams of yolk (35.4%), thus based upon a given composition of an egg, Meiji Seika Kaisha is considered to disclose egg whites with amount of 45.22 grams. Meiji Seika Kaisha discloses a ratio of egg whites to calcium at range of about 19 (45.22 grams/2.4grams).

**With regard to claims 1, 6 and 27**, Meiji does not disclose the exact range of ratio of egg whites to calcium as cited in the instant claims however, it would have been obvious to one of ordinary skill in the art to increase the amount of egg powder in a cookie formulation depend upon one's preference for texture and amount of added nutrient provided by eggs in cookie food product.

Meiji Seika Kaisha is silent on isoflavone in the cookie composition. However, Shlyankevich discloses a dietary composition comprising phytoestrogen (isoflavones) and calcium (col. 3, lines 15-30). Shlyankevich teaches the composition as a dietary supplement for preventing bone disorder such as osteoporosis (col. 2, lines 25-36). Additionally, Shlyankevich discloses dietary compositions comprising phytoestrogen (isoflavones) may be mixed with dietary wafers such as cookies (col. 5, lines 37-41). It would have been obvious to one of ordinary skill in the art to use Shlyankevich's dietary composition as a food additive in Meiji Seika Kaisha's cookie composition because Shlyankevich clearly teaches dietary the supplement comprises isoflavones for preventing bone disorder such as osteoporosis (col. 2, lines 25-36) and is useful with Meiji's cookie formulation for improve calcium absorption within the body.

**Regarding claims 3**, Meiji is silent on egg whites containing ovalbumin, ovotransferrin and ovomucoid, however ovalbumin, ovotransferrin and ovomucoid are considered naturally occurring proteins in egg whites.

**Regarding claim 9**, Meiji discloses milk, wheat flour, sugar and margarine which are considered functional ingredients.

**Regarding claim 11**, Meiji discloses the calcium and egg powder as active ingredients in dry powder form.

**(10) Response to Argument**

Appellant argues that calcium and isoflavones in parallel with egg white considerably enhances calcium absorption. Additionally, appellant's argues that giving calcium and/or isoflavones in parallel with egg whites considerably enhances calcium absorption which they believe is due to the stabilization of the calcium emulsion. However appellant has not provided any data or evidence to support this argument and have not argued that the references as combined would not be capable of this result.

Appellant argues that the art applied to the claims alone or in combination fails to disclose or suggest a calcium absorption enhancer comprising a weight ratio of egg white/calcium between 20 to 60. Appellant argues Kirschmann does not teach the amount of calcium content in egg whites.

Kaisha is relied upon for teaching an egg powder which includes egg whites and calcium in a cookie with the advantages of promoting the absorption of calcium in a person of low calcium absorption ('172, Abstract). Kaisha's composition comprises 70 grams of egg powder and 6 grams of calcium carbonate wherein calcium carbonate has approximately 2.4 grams of calcium. Kaisha's egg powder is considered to have both egg whites and egg yolks.

Kirschmann is relied upon as evidence of known egg white weight portions in the overall egg compositions and is relied upon for the calculation of the weight ratio of egg whites to calcium as taught by Kaisha. Kirschmann discloses known egg white weight

portions in the overall egg compositions. Appellant argues that Kirschmann does not teach the calcium content of eggs. Kirschmann is not relied upon for a calcium content of an egg. Kaisha teaches egg combined with calcium. Kirschmann is relied upon for its teaching of the known egg white content of eggs in order to calculate the egg white/calcium ratio of Kaisha. Kaisha teaches a composition comprising 6 grams of calcium carbonate wherein the calcium carbonate has approximately 2.4 grams of calcium. Kirschmann teaches egg composition comprises 31 grams of whites (64.6%) and 17 grams of yolks (35.4%) thus giving Kirschmann's ratio of whites to yolk in the egg composition. Kaisha discloses egg whites with amounts of 45.22 grams. Kaisha discloses a ratio of egg whites to calcium at about 19 (45.22 grmas/2.4 grams). Shlyankevich discloses a dietary supplement composition comprising phytoestrogen (isoflavones) and calcium for preventing bone disorders such as osteoporosis disease. Shlyankevich discusses osteoporosis is prevented by a daily intake of calcium to prevent reduction in bone mass ('331, lines 55-68).



Appellant argues the references do not teach or suggest the use of egg whites for enhancing calcium absorption, especially in combination with an isoflavone or claimed ranges. Kaisha is directed to promotion of absorption of calcium in a person with low calcium absorption (Abstract). Shlyankevich teaches the benefits of using isoflavones in a dietary supplement to prevent calcium loss thus is considered to provide motivation to combine with the food product of Kaisha to promote calcium absorption.

Appellant argues that it would not have been obvious to optimize the ratio of egg whites and calcium. Kaisha discloses a ratio of egg white/calcium of 19. This value is so close to the value range claimed (20-60) so as to be considered not patentably distinguished from the prior art and is considered prime facie obviousness. The compositions are in such close proportions to those in prior art that, prima facie, one skilled in the art would have expected them to have the same properties, and must be considered to have been obvious (*Titanium Metals Corporation of America v. Banner*, 227 USPQ 773). Additionally, it would have been obvious to one of ordinary skill in the art to adjust the egg powder including the egg whites in a cookie formulation depending upon one's preference for texture and amount of added nutrients in the food product. It is well known in the art that the amount of egg whites in cookies or baked goods affects the texture and mouthfeel of the cookie. It would have been obvious to one of ordinary skill to adjust or optimize the amount of egg whites in the baked good of Kaisha depending upon the desired consistency and texture in the final product.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/HONG MEHTA/  
Examiner, Art Unit 1789

Conferees:

/Jennifer C McNeil/  
Supervisory Patent Examiner, Art Unit 1784

/Keith D. Hendricks/  
Supervisory Patent Examiner, Art Unit 1781